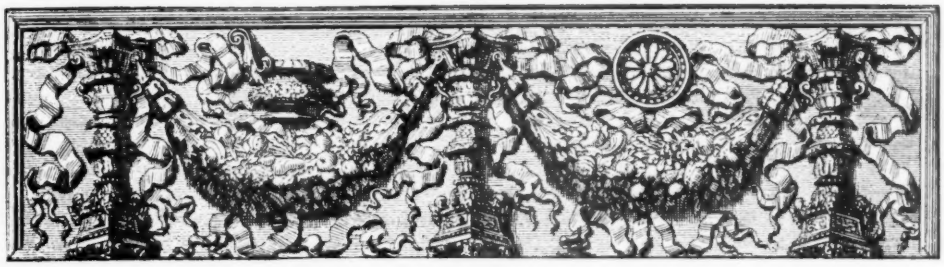

THE REBUILDING AND THE WORKMEN OF ST. PAUL'S CATHEDRAL FROM THE "ACCOUNTS."

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A BUILDING as unique as St. Paul's Cathedral has a long bibliography of its own, and it may be asked if it is possible to add to it usefully, and not merely continue the ancient game of pouring water from one vessel into another—from *Parentalia* into this and into that. One source however, and that the most plentiful, has hardly been tapped, and it is from dipping into this that the following essay, on the rebuilding of St. Paul's, owes its existence. The subject has been so much overlaid in two centuries of writing that it is incumbent on any future historian of St. Paul's to go back to contemporary records for his information. Of these the most reliable, and, for the architect, the most interesting, are the actual "Accounts" of the rebuilding. Reading, impressed on the yellow leaves, the faded handwriting of two hundred years ago a vivid picture starts up before the mind's eye of men toiling and moiling in the shadow of great cliff-like walls, and raising upon them at last a vast dome—realising the idea of a single man.

In what unknown diaries, I wonder, is the story of the building of St. Paul's hidden away? Certainly some among the citizens of London whose daily business took them past the slow-growing walls must have been impressed, and must have made a note of it. Dynasties changed, half the life of the ordinary man was spent before St. Paul's, free from its scaffolding, stood in its beauty and might over London. That diarist, however, remains to be found who saw with his own eyes the struggling horses straining to move the great blocks of stone, the baulks of timber, from Paul's Wharf to the Churchyard; who saw the mighty stones of "Seven Tun or more" being rolled on pieces of elm to the hoisting places; who saw, finally, the taut ropes of the "capsterns" raising them into position in the cyclopean walls of St. Paul's. Yet for some five-and-thirty years the citizens of London must daily have witnessed such scenes.

Thirty and more years of building cannot be accounted for in a single book, and there are many volumes of the "Accounts" in which one can glean something of old manners of building. They are human, too, these volumes, and new names appear by the score to arouse curiosity in all who are interested in the history of architecture—names of carpenters, joiners, bricklayers, plasterers, of all that numerous army indeed whose collective activity was necessary to the re-edification of St. Paul's. They work there and pass and die before the work is finished, almost every one of them except Wren. The pages of these "Accounts" are still rough with the sand used to dry the ink which wrote out, in the then new "Italian hand," very legibly and beautifully many of the details of the great undertaking.

The long history of the three cathedrals dedicated to St. Paul is punctuated by several conflagrations, which damaged, or, as in two instances, completely destroyed the church. The fire which occurred in the reign of William the Conqueror, disastrous as it was, hardly concerns us, but the Great Fire of 1666 does, in so far as it gave Wren an opportunity to rebuild the cathedral after a new

fashion. It may not be amiss, before reverting to the contemporary record contained in the "Accounts," which date from a period shortly after the fire, to consider the state of architecture at the end of the seventeenth century. A system of architecture, the principles of which were borrowed from Italy, had by this time become the national English style. So much so, that for more than a hundred years afterwards it was impossible for builder or architect to conceive the design of a building that was not informed to its very essence by what has been called, for want of a better name, Palladianism. Yet although England had been preparing to adopt this new system since the time of Henry VIII., it was a plant of such slow growth that it did not reach its culmination till Wren contrived his wonderful dome and placed it beside the clouds. The new style did not arrive therefore *per saltum*, but by slow degrees, creeping first into the delicate ornaments of architecture, gradually changing the flat Tudor arch into a lintol or a true Roman arch, until, like the irresistible incoming tide, it had covered everything. This change could not be stayed, any more than man could be prevented from looking through the window, just opened to him, to where men and women walked in the sunshine unashamed. The mediæval world, geographically and spiritually, had suddenly expanded, its old rigid bournes had become mere marches between continents which stretched on every hand to infinity. Men looking with their new eyes saw men of the very stature of themselves, possessing their very attributes—and Shakespeare fixed them in his book for ever.

In reality the Renaissance meant a new mode of life, more lightsome and full of new amenities and delicacies—indeed, a new sanity of living. Architecture was inevitably affected, and by the time Wren came to build, it had gone through its tentative efforts and stood forth completely transformed. The old mediæval architects were empirics, men without science, who raised their towers and spires fearfully into the sky. The new race of architects were to be scholars and men of science; and in so far as architecture is susceptible of the impress of the individual, it was to be henceforward stamped by personality. From this time, for better or worse, architecture was to be as individual as any other work of art. Its aim, moreover, was to be purely æsthetic, and as such it was understood by Wren.

From the date of the Fire to the beginning of positive building operations there is a period of some seven and a half years, a period too long to be disregarded altogether, and yet one which has seldom been properly investigated. It was inevitable that some time should elapse before the rebuilding of St. Paul's came to be considered at all. Houses had to be built for the people, life had to become normal again before there could be any question of rebuilding either the cathedral or the City churches. Besides, St. Paul's, if a ruin, was still a mighty one, and appeared easily susceptible of repair even to the initiated. It was not until April 1668 that Sancroft, who was then Dean of St. Paul's, admitted that Wren had been right in wanting to rebuild from the beginning, and begged him to come to London. It is not known if Wren obeyed this summons. He was summoned again in July, and shortly after he took charge of the works of "Repairacone," as they are called.

This preliminary work continued until April 1674, when the "Account" was closed. It is evident that the rebuilding was to be considered as a separate matter, financed by a separate fund, for the preliminary works are summarised with the amount of money expended on each. Before the summary there is "A Briefe Abstract of the whole Accompts contained in the Booke (*i.e.*, a book containing the Account) being for charges of work done preparatorie to the reedifieing of the Cathedrall Church of St. Paule in London with incidents thereunto from the ffirst daie of October 1668 to the last day of Aprill 1674, being ffive Years and Seaven Months," which shows that the total amount expended was £8,592 8*s.* 8¼*d.* This money was spent on work of diverse kinds, the most important of which were taking down the ruinous walls, chiefly at the east end and the tower, sorting and piling the old stones in heaps in the various yards around the church, clearing away rubbish, collecting and recasting the lead melted from the roofs.

Much of the shaken building still remained standing after the Fire, otherwise no attempt would

have been made to preserve it. Certain parts, however, had to be taken down, and bargains were made with workmen to do definite pieces of this work. In October 1668 Henry Russell received £30 "in part of his bargaine for taking downe the High Tower of the Church as low as the Stools of the lower Windows." In the following month he received a further £20 on its completion.

Thomas Newton and John Simpson also made bargains for "taking downe the high Walls and pillers in the Old Choir next adjoyning to the high Tower Eastwards," and also "for takeing downe the topps of the high inside Walls in the North side of the Nave." It is unnecessary to follow all the details of this church-breaking, suffice it to say that "the pulling down the walls, being about 80 Feet high, and 5 Feet thick, was a great and troublesome Work; the Men stood above, and work'd them down with Pick axes, whilst Labourers below moved away the Materials that fell, and dispersed them into Heaps."*

Sometimes, however, much greater deliberation was used and temporary scaffolds were erected to facilitate this work of demolition. In the October-December "Account" of 1671 there is a statement which bears this out. It reads: "more Carpenters employed in Setting upp Scaffolds to the East end . . . . as high as the topp of the Gable end thereof, and in making Trussells to use betwixt the Scaffolds for taking down the Walls the Pinnackles and the Rose Window there and in taking downe some $\overline{\text{pte}}$ of the Scaffolds againe after $\overline{\text{pte}}$ of the Wall and Pinnackles were taken downe."

In the words of *Parentalia*, Wren, "to gain Time, prevent much Expence and the endangering of Men's Lives," in the demolishing of the walls caused battering rams to be made. The first mention of such an engine occurs in the "Accounts" of January 1669, when carpenters are "making a Ram to beate down the great piller in the West end of the Church and helping the Laborers to worke it." Later, in October-December, 1671, carpenters are "Imployed in fitting a long Mast ffor a Ramm for the Smith to put on the Iron Work on the same." An iron spike weighing 28½ lbs. was fixed to the end of a mast, which was then fortified with bars of iron and ferrols. The ram was suspended level within a triangular-prop, and oscillated backwards and forwards by thirty labourers against the wall doomed to destruction. George Drew is the name of the smith who supplied all the iron for the rams, repairing them as they were damaged—for they were broken and made useless sometimes. In one of his accounts there is a charge also "for Iron worke for a great Leaver to poise up the great Pedestalls on the topp of the high Walls weigh Lxxvi lb. at iid. the working xiis. viiid."†

To facilitate the removal of rubbish, from the demolition of the tower, a hole was broken through the west wall into the portico, to make a way for the carts. A quotation under the date of January 1669, shows the labourers at this and the like work. They are "carrieing away stones which were thrown down from the Steeple and the high inside walls of the old Quire into the little yard next above the little North doore, pileing and placeing the Stones in the Severall Yards, Breaking a doore way in the West end of the Church into the Portico, Raming down the great Pillers and wheeling away rubbish and carrieing Stones into the Portico after the Piller fell downe, to make a passage for the Carts to carry rubbish from the Steeple."

Month by month great quantities of rubbish were carted away "out of the yards . . of the Church leading the same through Newgate from there to ffleete bridge (the passage at Ludgate being then stopt up, at xd. the Load." Sometimes this charge is reduced to 8d. a load. The rubbish was taken to "Fleet bridge, Pudle docke, Thames Streete and other places in the Citty," where it was, in all probability, shot into lighters and taken out to sea. It is interesting to find in the "Accounts" confirmation of some of the statements in *Parentalia*—the expedient of the ram is mentioned in some detail in the latter, so is the use of gunpowder, but in the wrong order. In *Parentalia* gunpowder comes first, whereas in reality it came last. In the "Account" for January—March 1672, can be read that carpenters are "cutting pieces of Tymber to make up the holes of ye pillers which were

* *Parentalia*, pt. 2, Sec. V., p. 140. (Ashbee Reprint.)

† This means that the iron was supplied by the Commissioners.

blowne up with Gunpowder on the North east, North west and Southwest Angles of the Great tower and two pillers more in the Nave of the Church."

Stephen Wren writes that a small charge of powder—eighteen pounds—was placed in the core of the north-west pillar, and that this was sufficient to cause the fall of the tower. Certainly, this statement can hardly be reconciled with the extract quoted above. Considerable quantities of powder were supplied and used during the greater part of 1672. The first "Account" reads: "Thomas Abrahall for 7 barrells of Corn powder, at 3£ 5s. p barrell—22£ 15s. Two halfe powder-barrells 3s., paid Charges carrying to St. Pauls 5s. 6d. xxiii£ iiis. vid."

The second and last Account charges for one barrel of this coarse-grained powder (corn powder) "and for 3£ of pistoll powder to fire the Train 3s." Fascinating as is the account given in *Parentalia*, it is hardly less so to find it more or less (generally less) confirmed in the "Accounts."

The gunpowder incident, as described by Stephen Wren,* is, however, a just and artistic heightening of fact, perhaps only less imaginative than Benvenuto Cellini's "Memoirs."

When so many workmen's names are given in the "Accounts," it is to be regretted that the name of the gunner who laid and fired the first trains of powder is not. Some carelessness or indifference on the part of the scribe has lost him whatever immortality there may be in the remembrance of a name. The hiatus has never been filled, so the "Account" reads:

"To —— Gunner for several Journeys from the Tower to St. Pauls about blowing up the first piller wth Gun-powder 5s. And for placeing the powder within the piller, laying the Trains and giveing fire to the same 4 Guineapieces at 1£ 2s. 9d.† IIII£ XIs.

The use of gunpowder was apparently discontinued because of the accident described in *Parentalia*, one stone being shot to the opposite side of the churchyard into a room where some women were sitting at work. Fortunately, no one was hurt. Confirmation of this accident is to be found in the "Accounts," where an item reads as follows:

"To John Longland Carpenter for new makeing a Bellcony in the house of —— Bookeseller which was broken in pieces by a great stone which was blown thither by Gun powder from the Wall in the morning prayer Chappell £1."

In these early "Accounts" a few glimpses may be obtained of Wren, before he had received his knighthood. Month by month his name appears side by side with that of W. Sancroft at the foot of the "Account," which is further certified by Phelips Auditer. In the "Account" from January to March 1670 appears the following:

"To Dr. Christopher Wren his Maj^{ties} Survey^{er} Generall and Survey^{er} alsoe of these workes for his directions in the worke and towards his paines in drawing and designeing a new Draught of the whole Church for the Joyners to make a Modell in Wainscott from the same and for his Attendance in giveing direc$\widetilde{\text{o}}$ns to the Artificers during the time of makeing the same Modell C Guinea pieces in gold at £Cxii. xs." †

The model to which this refers is not the great model, but a previous one, costing only about a third the price of the former. It was completed between March and April, 1672. The item treating of it reads:

"To William Clear in full of Twoe Hundred Pounds and ffifteene shillings for making a Modell of the Church in Wainscott. CL£ XVs. And to him for his men for expedition money ii£."†

The elaboration with which the models were made may be judged from this cost, which represents perhaps six or seven hundred pounds to-day. Clear's first payment (£50) in respect of this model was made between October and December 1669, so that considerably more than a year was consumed in its construction.

This model did not represent a grand enough idea, so Wren set about making a design—the so-called Model design, which is perhaps the noblest conception of a church in existence.

The "Accounts" of the actual rebuilding of St. Paul's Cathedral begin in May 1674; but, as I have

* *Parentalia.*

† The value of the guinea varied from time to time.

shown, work of a desultory nature had been going forward for several years, patching at the west end, clearing the site at the east and so on. Then the time was come to make a definite start on a new building. An "office of the works" and an "Appartement" for the Surveyor had been already installed in the Convocation house (the old Chapter House), where the building of the great model was nearing completion. Mr. Woodroof, the assistant surveyor, made drawings of "several peices of the Modell for the Joyners to work by," besides giving directions about other works. In 1673, on the granting of the "Commission for the new building the Church," the construction of this great model was undertaken. The design being settled, the first thing to be done was to make a base or foundation for it. This was the work by "William Clare Joyner," who charged £42 2*s*. 6*d*. "for makeing a Table and frame for the intended new Model of the Church to Stand upon." Clare also acted as foreman-joiner, putting in, between October 1673 and April 1674, one hundred and fifty days. The joiners' united time during this period was one thousand three hundred and seventy-six days and a half, which represents, £190 11*s*. 6*d*. In addition to the joiners' work there is masons' work to be accounted for—Joshua Marshal, of whom more hereafter, with two journeymen charge between October 1673 and March 1674 for "makeing Molds to cast Plaister upon for the Vaulting of the Model," 39*s*.; and William Beard, in April 1674, charges 40*s*. for "finishing the Molds and Casting Plaister for the Vaultings of ye Model." There are numerous incidental expenses, as: wainscot, "nayles and Irish Sprigs" and glue, "Ising-glass," a "haire sive to sift the Plaister of Paris for the casting of the Vaults of the Modell," "oile and Lard for the Moldings." The model was finished in September, when the last of the accounts for it was settled. Thirteen "Joyners" had been working at it during the previous three months, their united time equalling over nine hundred days. William Clare, the foreman, charging 3*s*. a day for himself and 2*s*. 6*d*. for the others, with the exception of James Miles, probably an apprentice, who has 1*s*. The total of their wages during this time amounted to something over £150. The elaboration with which this model was finished can best be gauged from the following quotations:—

For various ornamental parts of the model, such as the "76 Corinthian Pillasters at 3s. 9d. a piece", "ffor 10 round Capitalls at the west end at 9s. a peece", "ffor 27 flowers in the Arch and Suffiton at 6d. a piece", "ffor 4 neice heads at 5s. a peece", for these and innumerable other ornaments, Richard Clear charges 92*l*. 05s. 06d.

"Richard Bullock Turner for his work about the same" gets 20*l*. 00s. 02d. "John Grove for plastering the inside of the Dome and Lanthorn of the Modell, with the inside of part of the roof in the body thereof towards the west end, finding Workmanship time and hair, 01*l*. 00s. 00d."

At this date John Tillison was the clerk of the works, on whom devolved the payment of all "out of pocket" moneys and whose accounts are always very intimate. At the present juncture he charged "for 70 yards of Course Callico at 7*d*. p. yard for the Window Curtains in the Convocation house to keep the heat of the sun from the Modell" and "for 18 ffigures carv'd to stand upon the new Modell." The latter cost £3 12*s*. Unfortunately he does not give the name of the carver. In addition to these various expenses there is an item settled in June 1675 of £29 2*s*. "for gilding several parts about the Modell both within and without" and "cleansing and colouring stone and lead colour .... some parts twice and the rest 3 times." The interest and pains shown by Wren in making this model, which cost about £600,* is typical of the infinite care he exercised in the smallest matter concerned with his work.

It is not unreasonable to believe, as is stated in *Parentalia*, that Wren "always seem'd to set a higher value on this Design, than any he had made before or since; as what was labour'd with more study and success, and ... what he would have put in Execution with more Cheerfulness, and Satisfaction to himself than the latter." This is, of course, the design, the model of which still stands in the Cathedral, in a disgraceful state of dilapidation. In Longman's "The Three Churches dedicated to St. Paul," the illustration of the model shows the statues on the blocking course.

This design was approved by Charles II. in 1673 and the Commissioners were instructed to

* This sum must be multiplied by three or four to find the equivalent value to-day.

proceed with its building. Apparently a start was made; for in the five months, May-September 1674, carpenters were employed, among other things, "in making stakes and waiting upon the Surveyor for measuring and stakeing out the East part of the ground of the Church according to the New Modell." In furtherance of this work labourers were "Drudging wheeling and Carrying away Stones from ye ffoundacons at the East End of the Church unto the several heaps in the yards." They also were wheeling earth from the east end "to the place intended for the inside of the Circumference of the Dome" and covering "the ground of the ffoundations of the old Walls and Pillars (after the same were digg'd up and removed) with good hard Rubbish to preserve ye ground from ye prejudice of the Raines and Winter Weather." In preparation for the masons, holes were dug "to let in great dry fatts for water tubbs to keep water for store to make up Mortar."

It is impossible to decide at what date Wren found his great plan—*i.e.*, the "Model" plan—rejected. But when the labourers, in the months between October 1674 and June 1675, were "digging the ffoundations for the Masons to begin ye work upon the South side of the East End of the Church and part of the East End of the same," the new plan must have been decided upon. For these excavations are obviously for the foundations of the Cathedral we know to-day. Wren must therefore have anticipated the King's Warrant of June 1675, giving him permission to begin building the present structure, because in the following month the foundations of one half of the eastern wall and the south wall, as far west as the crossing, had been brought up to the ground level.

During the early stages of the rebuilding, two master-masons were employed, but as the work progressed—as the foundations extended westwards, others appeared on the scene, until there were as many as six, working at the same time. The original masons were Joshua Marshall and Thomas Strong, whose early accounts, made up in July 1675, give a very accurate idea of the scope of their respective operations. The account of the former reads: "To Joshua Marshall for Task of Masons Work by him done in the ffoundation of the south side of the Quire of the Cathedral Church of St. Paul in London (vizt) from the midle of the first Window Eastwards to the ffoundations of the Dome, including the South East Peer of the Same from the bottom of the ffoundation to the upper part of the plinth course, including Butterisses, Pillars, and holes filled up in the ground before the laying of the ffoundation walls att ffourteen shillings and six pence the rod according to Contract." The value of this work was £142 7*s.* 1*d.*, whilst Strong's, whose work extends "from the midle of the most Easterly Window of the South Isle and along the East End to the midle of the half Circle"—*i.e.*, the apse, amounted to £76 18*s.* 10½*d.*

It may be said here that this system of Masons' Contracts obtained until the building was finished. The entire ground plan was in a few years to be divided into eight unequal parts, and let to separate master-masons, in contracts of a few feet at a time. And it is from a perusal of the Masons' Accounts that the progress of the work can best be estimated at any given date. This system of contracts was, however, only practised by the Masons; in the other trades, and sometimes in the Masons' also, men were engaged and paid by "Day work" by the Clerk of the Works. As a rule none of the trades supplied materials—the stone, timber, bricks, lead, &c., being supplied by the Commissioners.

In August 1675 work was charged against the famous "North-east Corner," but I can find nothing in the "Accounts" which would confirm the circumstantial description of the founding of this Corner given in *Parentalia*.* Indeed, the entire passage in this widely quoted book dealing with the foundations, appears to be nothing but a tissue of misstatement. For example, it is stated that "he," Wren, "began to lay the foundation from the West-end," whereas the "Accounts" distinctly state that they were begun at the east. Again the depth of 40 feet, through which the Surveyor is said to have sunk a pit to the firm sea-beach is grossly exaggerated, as it is only some 20 feet between the layer of loam on which the Cathedral stands, to the London clay.

* Mr. Mervyn Macartney stated recently at the Society of Antiquaries that he had examined this corner, thrusting out a crowbar, from an excavation, into it, without meeting anything in the shape of a pier of masonry.

That ingenious device of Wren's—namely, the raised platform from which by means of perpendiculars he set out the places to be excavated below—seems also to be an invention of the author of *Parentalia*, for there is no item in the "Accounts," which, it may be stated, are full of detail, that could by any elasticity of interpretation be made to agree to that description. Besides, such an expedient would be unnecessary as the east part of the site was cleared before the foundations were put in.

Again, according to *Parentalia*, Wren had reached the extreme north-east angle with his foundations when he "fell upon a Pit, where all the Pot-earth has been robb'd by the Potters of old Time." Under this corner he is said to have built a pier of masonry 10 feet square, from the firm beach 40 feet below the pot-earth, to within 15 feet of the ground, where he turned a short arch under ground to the foundations he had already put in. Now the description in the "Accounts" may not be so explicit as the fascinating narrative given in *Parentalia*, but it has the advantage of being a statement of fact and as such may be quoted at length. It reads as follows :—

To Thomas Strong for Masons Work by him done in the ffoundations being from the Middle of the halfe circle East to the North east Corner from thence along upon the North Wall to ye middle of the first window North, beginning from the bottom of the ffoundations to the upper part of the Plinth Course, including the Wall, Butteresses, Pillars from the Gravell to the top of the bed of Loam to the upper part of the Plinth Course, ffor Workmanship at the rate of ffourteen shillings and Sixpence a rodd by contract.

Recent excavation has established the fact that the layer of loam or Potters'-clay has been removed along the entire wall at the east end and that the foundations rest on gravel at depths, taken from the level of the churchyard, which vary from 21 feet 2 inches at the south-east to 25 feet 10 inches at the north-east. The normal depth is 16 feet, which is the level of the top of the bed of loam on which the foundations, as a rule, rest.*

Longman writes that "the first stone of the new Cathedral was laid at the South East Corner of the Choir by Mr. Strong and the second by Mr. Longland on June 21, 1675." Some function may have taken place at this date to celebrate the reception of the King's order to begin building at last, nine years after the destruction of the older Cathedral, but the foundations of this South-eastern portion were almost finished by this time and the first stone consequently laid some time previously. There is a John Longland employed at the time as master-carpenter, who may be the individual referred to. This statement is taken by Longman from a manuscript description of the rebuilding written by Thomas Bateman, who was Clerk of the Works from 1690. His account has not therefore the authority of an eye-witness.

In July 1675 an army of men entered the arena of St. Paul's to labour for many long years to give material form to an idea which originated in the brain of one man. Mortar-men, Drugmen and Diggers, Barrowmen and Labourers, made the scene a busy one, as they cleared the site or prepared the way for the skilled workmen. From May to September in the previous year one thousand four hundred and eighty-eight loads of rubbish were carted away ; a continual stream of carts must have passed up and down to Paul's Wharf occupied with this work for years. The Carpenters in August 1675 made "a Conveniency of Boards and Timber to shoot Rubbish into ye Lighters at Pauls Wharf."

While the building was growing rapidly at the east end, the work of demolition went on apace. The old north and south gables and the walls of St. Gregories Church were being taken down at this time, not without danger, as the following item in the "Accounts" proves : "To 1 Coroner, 2 Beadles, summoning 2 Juries to enquire of the death of William Bancks and Richard Walker, Coffins and other incidentall Charges 4*l* 11*s*. 8*d*." The masonry, as I have shown above, was battered down with a ram as stated in *Parentalia*, but it was also taken down much more deliberately, for in November 1675 Masons were cutting "holes into ye wall of the North Gable end of the Church for ye Putlogs of the Scaffolds there." Then the stone was loosened and tumbled down, not always too carefully however, because in January of the following year Thomas Strong had to repair the "rubble Wall of the North

* Article in the *Times*, February 1, 1913, by the Surveyor to the Dean and Chapter, Mr. Mervyn Macartney.

eastmost corner of the North Cross Isle, which was beaten by the falling of the Stones in the taking down the North gable."

The work of demolition went on for many years, moving westwards to make room for the new work. An item dated March 1687 suggests that the last of the old building had almost disappeared. Labourers at that time "were taking down part of the Tower on the North side of the West end of the Church, and all the old Railes and Banisters which stood over the Collumnes of the Portico there, seperating the great stones and Ruble stones from the Rubbish." The Convocation house still remained to be taken down, and this was done about August 1690 by John Parker, Symon Satchell, Thomas Lofthouse, John Hoy, Richard Adams and John Scott, who were paid at the rate of 12*d.* a yard. Since the beginning of the work the Surveyor's offices and "Tracery room" and the "Model room" had occupied this building, and these had now to be transferred into the Cathedral.

When Wren began to build St. Paul's he had a veritable quarry at his feet. The Great Fire had destroyed the old building, but it had not made the stone of which it was built useless, and Wren used it extensively in the foundations and for the rubble cores of his walls. A common item of the "Accounts" shows labourers employed "in sorting and breaking of great old burnt Stones . . . and wheeling them for Rubble to the Masons' work next adjoyning." It was not until May 1676 that Portland stone began to arrive at St. Paul's; after that, month by month, it was delivered in great quantities. The supply must always have been inadequate however, because Wren was glad to get it from any quarry that had an outlet to the sea. It must be remembered that he was entirely dependent on water carriage, and that his ships were dependent on fair winds and fine weather. How often must the storms of winter, raging round the south coast, have delayed his vessels coming from Portland! But there was one quarry the continual output of which was not contingent on so many favourable conditions. This was Burford, owned by the family of the Strongs, three members of whom, from first to last, were master-masons of considerable portions of St. Paul's. In summer the stone-laden barges could float easily down the placid waters of the Thames from Oxfordshire to Paul's Wharf, and winter would not interfere with this traffic. Consequently we find that great quantities of this stone were used in the rebuilding, although never in the external walls. But in addition to this, stone was brought round to London in ships from Beer in Devonshire, from Kent and even from Normandy.

Several journeys to Portland are noted in the "Accounts," the most interesting of which is that where Wren himself is the principal figure. In June 1696 "Mr. John Toby Wharfinger at Portland" charged £4 16*s.* for a journey to London, "occasioned by the slideing of the Ways from the Quarries at Portland."

In consequence of this accident Wren had to go to Portland, and, being by this time over sixty years of age, he went by coach, as appears by the account which follows:—

	l.	s.	d.
To Sir Chr. Wren being allowed for his trouble and paines in a Journey to Portland and Surveying and directing at the Quarries there 12 days	30	00	00
Mr. Strong's assistance about ye same 12 days	12	00	00
To ditto. for Horse hire	00	17	06
Mr. Hawksmoor's Assistance about ye same 12 days	12	00	00
Henry Wood's Assistance about ye same 12 days	06	00	00
ffor Coachhire and Expenses of the whole Journey as p. Bill of particulars appears	50	07	05
Given to ye Workmen in ye Island a guinea	01	02	00

A journey into Portland in the seventeenth century would occupy five days, riding or driving at the rate of twenty-six miles a day. The route as it is set out in a contemporary "road book" passes through Basingstoke, Sutton, Stockbridge, Broughton, Taunton, Cranborn, Blandford, Dorchester and Weymouth. Quite apart from the length of time taken up by the journey, it must always have been formidable to the bones of all who travelled on wheels: for it must be remembered that this was before the passing of the Turnpike Act (1763), and the condition of the roads was dreadful.

In *Parentalia* it is said that "all the most eminent Masons of England were of Opinion, that Stones of the largest scantlings were there (Portland) to be found, or no where." Two of these masons must surely have been Joshua Marshall and Thomas Strong! Joshua was the son of Edward Marshall, a master-mason to Charles I. and Master of the Company of Masons in 1650. He must have been a man of considerable wealth, as he made a loan of £300 to the Company in 1665, receiving as security a lease of their Hall for fifty-one years. This money was raised as part of the £100,000 which the City of London loaned to the King toward the expenses of the Dutch War. Temple Bar was built by Joshua Marshall and Edward Marshall in 1675. The former was the master-mason at St. Paul's, but whether the latter is his father or brother it is impossible to decide. Joshua Marshall became Master of the Company of Masons in 1670, and perhaps again in 1677, if he is the Mr. Marshall whose name is recorded. The Strongs were not Londoners. Valentine Strong, whose son Thomas came to London, was a mason and quarry owner of Taynton, near Burford. The son built part of Trinity College, Oxford, and there made the acquaintance of Mr. Christopher Wren; and when artificers were invited, the year after the Fire, to help to rebuild London, Thomas Strong came, and brought up with him a number of workmen—a step rendered easy by the passing of a statute which gave permission for seven years to workmen not free of the Companies connected with the building trade to work anywhere within the City. Such a man as Thomas Strong, however, having considerable wealth, was enjoined by the Lord Mayor to take up the freedom of the Company of Masons.

In the quarterage book of the Masons' Company the following entry appears:—

> Thomas Strong made free (by redemption by an order of ye Court of Aldermen dated ye 8th day of September last) ye 15th of September, 1670, and in ye 22nd year of King Charles ye Second, and paid £1 3s. 2d.*

He was chosen one of the Stewards in the same year, paying a fine of £6. His father died in 1662, and was buried in Fairford Church, Gloucestershire. His epitaph is so curious that it is worth being quoted at length. It reads:—

> Here's one that was an able workman long,
> Who divers houses built, both fair and Strong;
> Though Strong he was, a Stronger came than he
> And robb'd him of his life and fame, you see:
> Moving an old house a new one for to rear,
> Death met him by the way and laid him here.

Neither Marshall nor Strong lived long after they had begun the great undertaking of the rebuilding of St. Paul's—the former died in 1678 and the latter in 1681.

When Edward Pearce, the mason who built St. Clement Dane's, took over the work on the south side of the Cathedral from Marshall's executors it had reached the height of "the Astragall of the small Pilasters," and the south portico was up to the level of the church floor. On the north side the work was carried on by Jasper Lathom as far as the middle of the north portico. Meanwhile work was proceeding farther west. Thomas Strong was building the north-west vestry and the two legs of the dome adjoining it and the half of the portico abutting against Jasper Lathom's work. He had also laid the foundations of the wall of the nave "from the midle of the North window next ye North West Vestry . . . to the middle of ye third Window on the North side." At the east end Thomas Strong's work was as high as the springing of the arches of the windows when he died. Edward Strong succeeded his brother and continued the building of the east end with the returns north and south to the centres of the first windows in the choir aisles, and from the middle of the north portico to the middle of the last window in the north nave aisle. In 1687 he carried his work as far as the middle of the window in St. Dunstan's Chapel. This is the extent of Strong's work on the main building, and although it is a larger portion than that assigned to any other mason, it effectually exposes the fallacy that he was the one and only master-builder. As I have shown, he did not begin

* *The Hole Craft and Fellowship of Masons*, by Edward Conder, Junior.

the foundations, and his son Edward finished the building by erecting the lantern on the top of the dome.

By the end of 1678, Thomas Wise had laid the foundations of the "two southwest Legs of the Dome and ye great Staircase," and, proceeding westward, undertook the work to the middle of the Chapel of SS. Michael and George. When he died, in 1686, the first part of his work was as high as the cornice of the Corinthian order and the wall of the south nave aisle up to the springing of the window arches. He was succeeded by his son Thomas Wise, with a partner, Thomas Hill.

In September 1687 there is an item in the "Accounts" which shows that the work had at last almost reached the west end, when labourers were "diging and throwing up 1215 yards of earth to make way for the ffoundacons of Mr. Tompson's new Work of ye Southwest Chapp[ll] at 8s. p. yd." And further "ffor digging and throwing up 42 yards and ½ of Earth at the West End to bring the Corps taken up in St. Gregories Church Yard at 8d. p. yd." And in March of the following year several labourers working "by Task" were digging out earth for Mr. Tompson's foundations at the south-west corner, and for Mr. ffulkes at the north-west. The last item of this account is curious: it reads: "ffor removeing 162 Corps out of St. Gregories Church Yard at 6d. each 04*l* 01s. 00d." John Thompson and Samuel ffulkes built the west end with the towers and the westward halves of the two morning prayer chapels, the work of the former being finished, however, by William Kempster. About 1690 Edward Pearce and Jasper Lathom, the two masons who were building the north and south walls of the choir, died, and were succeeded, the former by Christopher Kempster and Ephraim Beauchampe, and the latter by Nathaniel Rawlins. By this time the mason-work, east of the crossing, was up to the necking of the second order.

At the beginning of the new century the drum of the dome was beginning to show above the roofs. It might be thought that this part of the building would have been undertaken by one mason, but it was subdivided into four parts and allocated to the four firms of masons who had finished the substructure—namely, to Edward Strong at the north-west, Thomas Hill and Thomas Wise at the south-west, Christopher Kempster and Ephraim Beauchampe at the south-east, and Nathaniel Rawlins at the north-east.

By the end of 1706 the peristyle of the dome was finished, as the following item shows:—

To Edward Strong Mason for Worke done by him being the remaining part of the Attick Wall of ye Dome w[ch] intirely finishes the same and is 13 f[et] 4½ higher than the former Measure.

The total of this last account, which was paid in February 1707, was £736 10*s*. 9*d*., and was, of course, the same in the case of the other masons.

The last mason to be employed by Wren on the rebuilding now appears by name for the first time in the "Accounts," although it is likely he was employed previously by his father. Under the date of January 1707, Edward Strong, Jun., received,

"For a Mason 33 days in modelling the lap of ye Cone and Foundacon of ye Lanthorn at 2s. 6d. = 4*l*. 2s. 6d.", and 16*l*. 10s. 0d. "For a Modell of Wood w[th] its Embellishments for ye Lanthorn."

In the following month there is a charge made

for removing ye wrought stones and putting part of ye Lanthorn together

	l.	s.	d.
A Mason 6 Days at 2s. 6d.	00	15	00
Labourers 38 Days at 1s. 6d.	02	17	00

This means putting the stones (of the top of the cone) together dry, on the ground, to make sure that they fitted, before being hoisted to their final resting place.

The lantern must have been in course of erection by the end of this year 1707, for in November Edward Strong charged

For days work in letting in the barrs in ye Jambour of ye Dome and letting in a Chain upon ye Crown of ye Cone etc.

	l.	s.	d.
217 days of Masons at 2s. 6d.	37	02	00
30 days of Labourers at 1s. 6d.	01	10	00

In the Memoirs of the Strong Family it is stated that the last stone on the top of the lantern was laid by Edward Strong on 26th October 1708. *Parentalia* gives the date as two years later, but the former statement is borne out by the "Accounts." In October Edward Strong charged

	l.	s.	d.
For 163 Days ½ of Masons cramping the Attick of the Lantern letting in ye Windows in the Crown of the Cone, letting in sev[ll] Bolts and a Chaine under ye Attick Cornice Tooming down the Crown of the Cone etc. at 2s. 6d. per day	20	08	09
For Labourers 24 days at 1s. 6d.	01	10	00

Although Strong makes charges in the following months, it is not for building, but "for cleaning the Work stained by ye Timber in the Lantern repairing what was accidentally damaged in raising Materials." This is in November, when it would seem from the above extract the scaffolding was actually being struck.

If the erection of the Ball and Cross can be taken to signify the completion of the building, then it was finished by the end of the year 1708. In September carpenters were "frameing and raising the Cap for ye Lanthorn," and in November the plumbers' account is settled for the lead of the cupola of the lantern.

The building thus being finished—for the south-west tower was completed by William Kempster and the north-west by Samuel ffulks in 1707—it must not be thought that the masons had come to an end of their work. Repairs had to be undertaken on an elaborate scale, the fluting of the columns and pilasters had to be cut and the floor of the church paved. So they worked on for several years longer.

The last important work to be undertaken was the erecting of the balustrade in 1718 by Christopher Cass, mason, whose labour amounts to £2,369 18s.; in addition to which he received £25 "as a gratuity for his Care and Expedition in performing his Contract of the Ballustrade round the Church as p. Order of the Commissioners."* This was the year in which Wren was dismissed from his position as surveyor. The works, however, were almost finished. Sir James Thornhill continued painting the dome until 1720, and Francis Bird was carving his fifteen statues of saints and apostles for the west, north, and south sides of the church until 1724.

A curious feature of the masons' contracts is the fact that they included the carving within their limits of work. Particular pieces were executed by Grinling Gibbons, Caius Cibber, Jonathan Maine, and Francis Bird, but all these men must have been able to find skilful carvers to carry on their contracts. Indeed at the time there must have been admirable schools of native craftsmen, which, it is perfectly certain, these former did nothing to found. The names of these assistants do not appear, nor have we any means of knowing what carvers were directly employed by the masons.

In no branch of art was the seventeenth century more accomplished and prolific than in that dedicated to the service of the dead. There is hardly a church in England that is not the depository of some fine tomb. Many of them are masterpieces of the sculptor's craft, many are the work of patient lapidaries, but they all, the humble memorial as well as the great, have power to move us by the quality of their art. A traditional excellence is part of their contexture. The authors, for the great part anonymous, are the descendants of the Gothic carvers and stone-cutters. Numberless memorials perished in the Great Fire of 1666, and although London is singularly rich in this form of art, few belong to a date anterior to the Fire. Nicholas Stone's figure of Dr. Donne is the only memorial in old St. Paul's that escaped the dreadful conflagration. Very little is known of the sculptors of the

* The majority of the masons of St. Paul's were Masters of the Masons' Company. J. Marshall was Master in 1670, Edward Strong in 1696, Thomas Wise in 1681, Thomas Wise, jun., in 1698, Thomas Hill 1699, John Thompson 1690, Christopher Kempster 1691, Ephraim Beauchamp 1701, William Kempster 1705, Edward Strong, jun., 1718, and Christopher Cass 1725. Jasper Lathom was a Warden in 1689. I have been unable to find whether the others, Samuel ffulkes, Edward Pearce, and Nathaniel Rawlins, had any connection with the Company. They may have belonged to provincial companies.

Renaissance tombs. According to Stow, "The Company called by the name of *Marblers*, for their excellent knowledge and skill in the Art of Insculpting personages for Tombs, Gravestones and Monuments in Churches, and elsewhere in Religious places: their antiquity, and what respect they have carried, is unknowne to me, nor can I find them to bee incorporated, but hold some friendship with the *Masons*, and are thought to be esteemed among them in Fellowship." It appears, then, that at the time Stow wrote, the *Marblers* had ceased to exist, if they had not become amalgamated with the Masons' Company. There can be little doubt that this is what happened, for Nicholas Stone, who was sculptor as well as mason, became Master of the Masons' Company in 1633-4. The Marshalls, Edward and Joshua (both Masters of the Company), succeeded Stone as Master-masons to Charles II. Edward Marshall carried on business as a stone-cutter or statuary mason in Fetter Lane. Some of his works in sculpture include the monuments to William, Earl of Devonshire, and his Countess, at Derby; Sir Robert Backham, at Tottenham; Sir Dudley Biggs, at Chatham; and the family tomb of the Cutts, at Swaveley, in Cambridgeshire.* Joshua Marshall succeeded to his father's business in 1675, and, as I have shown above, was one of the first masons to be employed at the rebuilding of St. Paul's Cathedral. It may be mentioned again that he was the contractor for the erection of London Monuments on Temple Bar, but in neither case was he the carver.† Gabriel Cibber was employed on the first, and described as sculptor-mason, while Bushnell was the carver of the second. It does not follow, however, that Marshall was not a statuary like his father. Mr. Beresford Chancellor suggests that he executed the pedestal of the monument of Charles I. at Charing Cross.

It is a curious fact, moreover, that several others among the masons of St. Paul's are known to have been sculptors, and the close relationship between the *Marblers* and the *Masons*—being in effect one—would certainly tend to make the distinction between the two crafts very slight. Edward Pearce (who, besides working at St. Paul's, built St. Clement Dane's for Wren) must have been a carver of some note, as he executed statues of Edward III. and Sir Thomas Gresham for the Royal Exchange, Sir William Walworth for Fishmongers' Hall, and busts of Wren and Newton for the Bodleian at Oxford. His most important work is the monument to Sir William Maynard, in Little Easton Church, Essex.

Latham, another St. Paul's mason, is said to have been the author, in conjunction with one Bonne, of a monument to Archbishop Sheldon in Croydon Church. Latham is referred to as the City architect in connection with this tomb.‡

However it was done, the carving was begun almost simultaneously with the building and progressed with it, as will be seen by an item in the account of Joshua Marshall's dated 1677

ffor Workmanship and Carveing of 3 great Keystones and their Curbs in the Brick Arches, being carved wth water flowers and revailed at 50s. p piece, 07*l.* 10s. 00d. ffor 5 lesser Keystones and their Curbs in ye side Isles carved as above at 35s. each 08*l.* 15s. 00d.

These keystones occur in the crowns of the vaults in the crypt and appear to be admirably done, so far as one can judge in the dim light. In the centre of the vault, where it turns into the apse, is a great shell which, coming within the sphere of Thomas Strong's work, was carved by him. His account reads, "ffor Workmanship and Carveing of one great Escallop with its Curb in the Vaulting of Brick at ye east end, 08*l.* 00s. 00d." This procedure obtains to the end. The carving of the capitols, "ffestoones," "Cherubims," "Pieces of Drapery and Lawrill," "Scrowles," and "Cartouches," were all included in the masons' contracts. It is not until June 1694 that Grinling Gibbons' name appears in the "Accounts," when he charged £128 "ffor carving the Severall Ornam^{ts} of 4 Spandrills in the Leggs of the great Dome at 32*l.* each Spandrill." By September he had carved eight festoons at the east end of the church, and in December he charged for "11 ffestoones and other ornaments under the Outside Windows at ye east end at 13*l.* p peece," and in January 1694 seven more at the same price.

(*To be continued.*)

* *The Hole Craft and Fellowship of Masons.* † *Ibid.* ‡ *Lives of the British Sculptors*, Beresford Chancellor.

SENLIS AFTER THE GERMAN VISITATION.

By Edward Warren, F.S.A. [*F.*].

PARIS, no longer superficially gay, no longer a city of glitter and cheerful noise, has at this moment, to a quiet observer, attractions of an unwonted order, and appeals of a deeper and wider range perhaps than the much admired capital we have known and liked so well of old. The beauty of her buildings, the grandeur of her garden spaces, the splendour of her river with its quays and bridges, remain to her of course, and the autumn sunshine still falls radiantly on her fair façades and gilded domes; but she is serious and sad, tranquil in her courage and her patient endurance, like the nation she represents. Her traffic on foot and wheel is greatly diminished, young men and even soldiers are conspicuously absent from her streets. Such uniforms as appear are mostly those of "infirmiers," and the motor wagons of the Croix Rouge replace the thunderous 'buses of normal times. The Red Cross, indeed, is everywhere. Several great hotels, closed to the usual order of visitors, display this symbol of invitation to those more honoured guests, the wounded sons of France or of France's friends, fresh from the northern battlefields.

The blue capote and red trousers, however, are not quite absent, and alert and cheery-looking half companies and squads swing over the bridges or tramp down the Rue de Rivoli, while little knots of British ambulance men, or strolling convalescents from the hospitals, look on with friendly interest, comfortably clad in their unbecoming khaki.

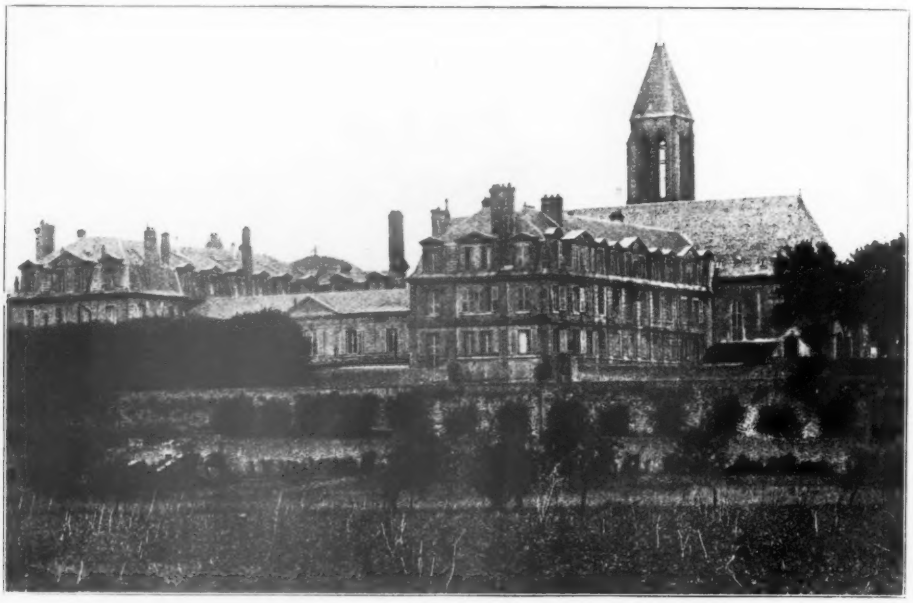
The blankly shuttered fronts of many shops and restaurants tell their tale of absent proprietors or absent customers, but a gay and almost festal touch is imparted to every street by the innumerable flags of France and the Allies.

Unusual displays of picture postcards, all more or less concerned with the war, spread over blank wall spaces, and the selling of newspapers is only a little less active and demonstrative than in London, while at privileged corners hawkers have established military toy stalls, where brilliant little leaden armies represent the Allies, and batteries of diminutive "75's" complete with limbers, caissons and teams, excite the envy of small would-be gunners. The trams still run along the quays and through some of the boulevards and avenues. Motor-cabs, and the well-known little "Victorias" of our youth, with their small white or grey horses, still ply in adequate numbers. The suburban trains run with diminished frequency and creep to and from their extramural termini, and will carry you even to such scenes of recent invasion and outrage as Chantilly and Senlis.

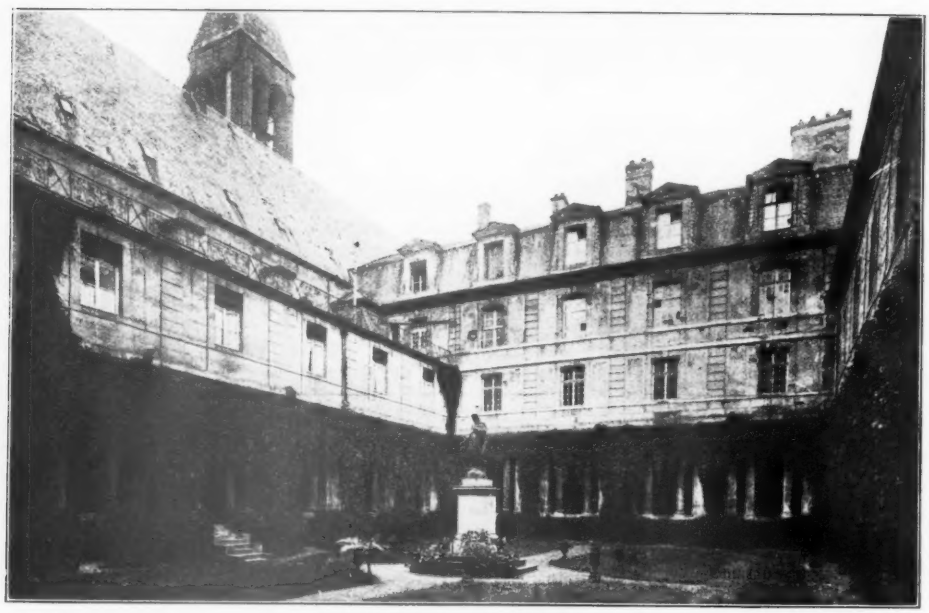
A recent and splendid November Sunday, of cloudless blue and gold, lured me, with the added temptation of French companionship, to Senlis. The cheer-

fully crowded train and the prosaically peaceful outlook from its windows showed no sign of war, and but for the newspaper on one's knee and an occasional glimpse of a picket or a bridge sentry with gleaming bayonet, there was nothing to remind one that war, dire and awful, was actually raging less than an hour's journey to the northward.

It was thus with something of a shock that we



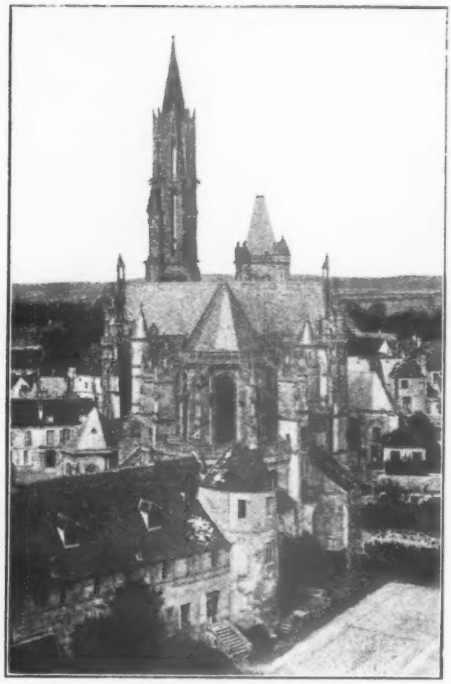
Collége St. Vincent



Collége St. Vincent: Quadrangle

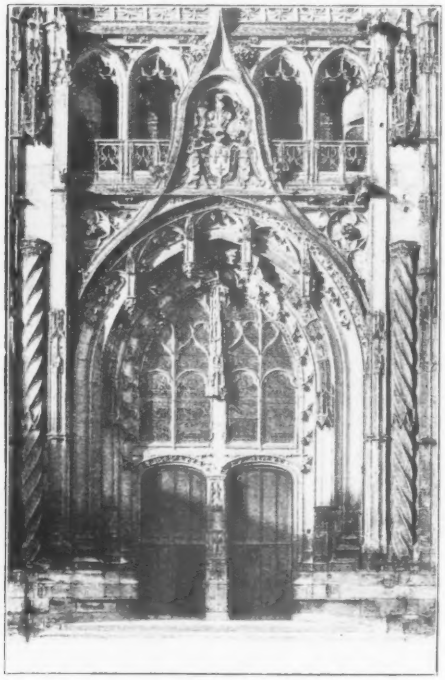
gazed at the charred and twisted skeleton of the little station as we slowed into Senlis. The blithe volubility of the Sunday crowd was a little stilled for the moments of exit from this sorry heap of ruin, to be resumed with less volume by the groups that strolled away towards the tree-girt little town and the tall attenuated spire of the Cathedral.

For a few hundred yards there was no repetition of



Cathedral from the East

Cathedral from South-East.



South Transept.

Collége St. Vincent: Entrance Gateway.

this dismal reminder that a few weeks ago this typical and beautiful little French town had been for a couple of days at the mercy, such as that is, of the invader. Nothing but smart and prosperous-looking little cottages and villas and their gardens. Then, all of a sudden, as we turned into the Rue de la République, the abomination of desolation presented itself in smashed and burnt houses and shops, one after the other, along one side of the way, at first, then on the other, then on both. Ruined, roofless shells, with empty door and window openings, charred beams and twisted ironwork fallen upon heaps of brick and calcined stone. Here was a mill with the clear stream running below its motionless wheel, past a trim and pretty little garden still gay with flowers and flowering shrubs; behind this the fine substantial house of the miller, a charred and roofless ruin completely burnt out. Further on, a charming old house half smashed by shells, the full impact of which had been felt by its neighbour over the way, now a mere formless heap of rubbish. A little lower down, the fine house and garden of "feu Monsieur le Maire," wantonly murdered with some ten, we were told, of the leading inhabitants. It is evident that most of the havoc is the result of careful and deliberate incendiarism, not of bombardment. As we looked at the dismal scene of wreckage, a sad and kindly old gentleman came up to inform our ignorance. He had seen the Germans at work, composedly breaking a ground-floor window pane, throwing in a petrol bomb, watching a moment to see that it "took," and passing on to the next selected victim, with the method and deliberation of postmen leaving letters. The excuse for German murder and arson was the usual one, the inhabitants had fired on the troops, whereas the only firing done, said our friend, was by a handful of Senegalais soldiers, who fired a few shots outside the town, "comme de droit."

At the barracks further down the street, however, the long low yellow-washed buildings are spattered with shrapnel bullets, and one of its sturdy gate piers shattered by a shell. A knot of dapper officers, splendidly mounted, and wearing the light-blue and silver, with scarlet breeches and kepis of the Chasseurs à cheval, clattered in incongruously as we viewed these vestiges of war. But returning uphill to the winding and narrow old streets near the Cathedral we found a war-worn, bronzed, and bearded little group of infantrymen, cheery, gentle and courteous in their shabby stained blue overcoats and muddy boots, smoking contentedly beneath the rude black bust of Henry of Navarre in its niche, outside the door of the Town Hall. A pretty little girl of six or so offered us an ugly fragment of a shell in her chubby pink hand—"Quatre sous, M'sieur, faut aller loin pour chercher." "Et toi," we asked, "tu a vu les Allemands? Eh bien, comment sont-ils; ils sont gentils?" "Oh! non, M'sieur; sont pas gentils, sont meç'ants."

In the charming high-walled lanes close to the Cathedral, there are very few instances of destruction, and the beautiful building itself, small for a cathedral, but of respectable size for a church, has, in spite of newspaper accounts, suffered almost not at all. The tall narrow 13th century south-west tower, with its thin detached shafts and attenuated spire, is practically intact. A little of the traceried parapet between the two west towers is smashed, a gargoyle has been lopped like a carrot, a pinnacle or two truncated, and there are two holes in the outer roof. Inside there is no sign of war or trace of demolition. The vivid and deplorable modern glass of the windows is intact, one is tempted to say unluckily so. The lofty 15th century transepts, and their elaborate doorways, owe none of their slight dilapidations to recent war, but perhaps to the Revolution. No more harm has been done by the Germans to this interesting and charming little cathedral than can be put right for three or four hundred pounds. Outside amidst the clustering houses it is different, and it is difficult to understand how such complete ruin can have been dealt to the Rue Bellon, a little street close to the conspicuous church, and to the Carréfour de la Licorne without more damage to that structure. The cause may have been inaccurate aim, but the two fine desecrated churches of St. Frambourg and St. Pierre have also escaped, which looks like discrimination.

The fine Collége of St. Vincent, a Jesuit establishment which retains the lofty 13th century tower and the Chapel of the ancient Abbaye, on whose site it stands, is intact with its incongruously picturesque Louis Quatorze façade, and its quiet cloistered quadrangle, which reminds one of a Cambridge Court with a little added "style." Chalked on a doorway near the College we came, almost with a shock, upon a German inscription, well remembered from the newspaper accounts of two months ago, praying good folks to spare this house, a prayer happily granted. As we inspected this a sudden droning buzz became manifest aloft, and brought people scurrying into the street, as a soaring monoplane whirred over us against the blue sky. A Taube? No! a French machine, for there are the rings of red, white and blue beneath the planes.

Senlis has still, as we can testify, a smart and thriving inn, where every reasonable want is promptly and excellently supplied. Its children play gaily at their little hopping dancing games in the narrow streets, while their elders chatter socially upon their doorsteps. The streets, and there are happily many, which are quite untouched, are just the pleasant informal old ways of a prosperous and charming old French town, gay with signs, the little glistening brass basin of the barber and the red cigar of the "débit de tabac." Senlis is still herself, and will soon, we trust, be smiling again as radiantly as of old.

UNIVERSITY OF SHEFFIELD COLLECTION OF GEORGE DEVEY'S DRAWINGS.

By W. S. Purchon, M.A. [*A.*].

IT may first be of some slight interest to put on record the manner in which this charming and interesting collection came to Sheffield.

In August last Mr. Arthur Keen, a member of the Board of Architectural Education, asked me if I would care to have some of Devey's sketches, as Mr. James Williams, Devey's partner, was anxious to dispose of them to someone who would be able to make good use of them. I naturally informed him that if I received the drawings I would guarantee that they would not only be useful to me and to my students, but that they would be highly appreciated by all in Sheffield to whom architecture means something more than a somewhat precarious method of making a living. I also promised that the drawings would be given a permanent home where they would be carefully preserved. The best method of carrying out the latter promise appeared to be that of presenting them to the University Library, and this step has therefore been taken.

Highly as these drawings of Devey's have been appreciated by those to whom I have shown them, it occurs to me that there may be some who will think them so slight and trifling as to be of little moment. In justice to Devey it must be pointed out that these drawings we have received are not the pick of his work, as a large collection of his sketches was first sent to the R.I.B.A., but it seems to me that the Sheffield Collection is not only a valuable record of architectural activity at a most interesting period in the development of the art in England, but it is clearly the work of a man who was an artist to his finger tips and who thoroughly loved his work. Even the slightest of the sketches we have received is full of life and charm.

GEORGE DEVEY.

George Devey was born in 1820 and died in 1886. He is stated to have studied under the artists John Sell Cotman and J. D. Harding, and doubtless to these early studies he owed, in large measure, his extraordinary facility with pencil, pen, and brush. He was articled to a Mr. Little, a surveyor, and Devey and a fellow pupil, Stone (the father of Mr. Percy Stone, architect), travelled in Italy and Greece making many charming sketches.

Devey started practice in the 'forties, and was elected a Fellow of the R.I.B.A. in 1856. His first work of importance seems to have been the restoration of Penshurst Place in 1851. About this time architecture in England was almost entirely frigidly cold Classic or almost equally cold Gothic. Devey loved the work of the Middle Ages, but he was one of the first of the nineteenth-century architects to perceive the charm of the work of our early Renaissance designers and the fact that a freer type of design might possibly be more suitable to the requirements of his time than copies of the work of either the Greek or Gothic period.

Devey was also a lover of the delightful cottages which are to be found in so many of our English villages. Early in his career he was a master of the design of lodges and cottages, many of these harmonising so well with their surroundings that they have often formed the subject of sketches and photographs.

Working on the lines already indicated, Devey designed many large country-houses, and in so doing prepared the way for Norman Shaw, Philip Webb, and Nesfield. This is clear from the fact that in 1856 he designed Betteshanger, near Dover, for Lord Northbourne, while Norman Shaw, who was born in 1831, did not design Lowther Lodge until 1870, and Nesfield, who with Shaw is popularly supposed to have started the new movement, was not born until 1835, and was serving his articles between 1851 and 1853 in the office in which Shaw was a pupil.

Devey died in 1886, his partner, Mr. James Williams to whom I have already referred, becoming his successor. That Devey is so little known is certainly not because his work was either inferior in quality or small in quantity, for it was, on the contrary, both delightful and extensive; rather is it because Devey was essentially a man of quiet, modest, and retiring disposition.

A PHOTOGRAPHER'S ART.

Exhibition of the Work of James McKissack (Glasgow), at the Camera Club, 17 John Street, Adelphi, W.C.

Photography is associated with architecture, primarily, as a means of scientific and exact record, and is mostly employed for recording design, construction, or legal fact. Considered as a somewhat mechanical form of expression, its employment in practice is usually relegated to the commercial photographer, just as we send our copying to the lithographer or law stationer. Comparatively few architects consider it as a means of artistic utterance, but that photography is a highly suitable medium of expression and impression is justified to the utmost by the exhibition of James McKissack's pictures now open at the Camera Club, 17 John Street, W.C.

Amongst the sixty-odd pictorial photographs shown there are none that can be characterised as merely topographical maps, and those that can be classified as architectural are all architectural in but a minor degree, being chiefly concerned with composition, atmosphere, and the subtle and elusive effects of lighting. This is exemplified in such pictures as "St. Jacques, Lisieux" (No. 4), "A Wet Day, Rouen" (No. 8), "Mechlin" with its characteristic tower (No. 23), and "Notre Dame de Paris" (No. 25). That Mr. McKissack has a true knowledge of the value of line and balance is revealed in his decorative treatment of "Salmon Fishers" (No. 10), which could well be utilised as a *motif* for mural decoration

on a large scale. There are quite a good proportion of figure studies full of true human interest and graceful treatment, and there is more than professional interest in the rendering of "Scaffolders" (No. 45).

Mr. McKissack would also seem to have a poetic craving and outlook, for he has added the quality of romance to some haunting castle—"The Castle of Romance" (No. 30)—and has clothed "Notre Dame de Paris" with a feeling of charming mystery and imagination. "Scarboro'" (No. 27), or at least its old-world fishing port, is quite "an impression" in treatment, and "Boulogne" harbour (No. 39) has been endowed with a very haunting impression of smoke, mist, and shipping, and the elusive effects of light thereon.

The exhibition reveals a very versatile outlook both in subject and treatment, but withal retains a certain uniform personality throughout, and is altogether a great artistic achievement.

THOMAS H. B. SCOTT, *Licentiate.*

REVIEWS.

THE ENGLISH PARISH CHURCH.

The English Parish Church. An Account of the Chief Building Types and of their Materials during Nine Centuries. By J. Charles Cox, LL.D., F.S.A. 8o. *Lond.* 1914. 7*s.* 6*d. net.* [*B. T. Batsford, Ltd.*, 94, *High Holborn.*]

At last the English parish church seems to be coming into its own. It has been overshadowed for the most part by the monastic, collegiate, and cathedral churches, to which have been devoted numerous and valuable monographs, and on whose architectural details the older text-books of English Gothic were mainly based. But the parish church was in no sense what it was often thought to be, a reduced and so inferior copy of a cathedral. There are of course exceptions, *e.g.* St. Mary Redcliffe, vaulted and clerestoried, with full equipment of transepts, procession path and Lady chapel, and with central tower, the stump of which may still be seen by anyone who will undertake the dirty climb beneath the low roofs above the vaults; such instances, however, are few. All churches, great and small, were built to provide shelter for ritual and services; but the ritual of the parish church was not that of the cathedral, nor *vice versa*. From the beginning the cathedral churches, having to serve multiplex purposes, were built on a scale undreamt of by church builders in village and town: and from the first, as at Winchester and Norwich, they started with a plan of the utmost complexity. With the parish church it was not so. Only one complication is found in its earliest plan: it had a chancel as well as a nave; and even that is not invariably found: a higher type being one which was not bipartite, but tripartite, its choir and sanctuary being architecturally distinct, as at Iffley, and the choir covered with a central tower. A yet higher type, but still of very early date, is that in which the towered choir is reinforced to north and south by transepts, designed to provide additional chapels. To these beginnings increase of population and need for greater accommodation added aisles, and the foundation of chantries added yet more chapels and altars. This in brief is the history of parish church development; it is not the history of the way in which the cathedral, monastic and collegiate churches reached their final form. The planning of the parish church is dealt with fully in Dr. Cox's interesting book in a long chapter reinforced by numerous plans. (We rather take exception to that of Newark church, in which the piers of the crossing are shown without the Norman work which is certainly there.) A fresh contribution to the subject is that a few of the later and larger parish churches, *e.g.* Redcliffe, Hull and Newark, possess the distinct ambulatory or procession path, which is an almost invariable characteristic of the later cathedral plans. Another chapter, necessarily brief, gives the usual account of the characteristics of Norman, Transitional, Early English, Decorated and Perpendicular, to which the author would like to add Geometrical; the use of a set of misleading labels is, however, not desirable in any case, nor is it in consonance with recent practice, as the writer acknowledges. Then comes what is the freshest and most interesting feature of the book—a special chapter devoted to materials—a subject which has long needed treatment. The writer's remarks on mediæval building stone, quarries, and transport are of much interest and value. Then follow sections on flint rubble-work, flush-work, and chequer-work, brickwork, plaster, white-washing, mortar, thatching, tiling, lead roofs, and ironwork. Finally, we are shown how to study an ancient church, externally and internally, the treatment of which reminds one of Dr. Cox's valuable and popular book on "How to Write the History of a Parish." It should be added that the book is charmingly produced, and that the illustrations are not only very numerous, but frequently of great beauty. But why truncate Patrington spire?

FRANCIS BOND [*Hon. A.*]

CORRESPONDENCE.

The Architecture of Humanism.

To the Editor, JOURNAL R.I.B.A.,—

SIR,—Readers of the Institute JOURNAL will have been much interested in Mr. J. L. Ball's criticism of "The Architecture of Humanism." Mr. Geoffrey Scott's book is of such a polemical character that it must necessarily call forth many diverse expressions of opinion. May I, without any disrespect to your reviewer, describe briefly the impression which the book has made upon some of those who, not calling themselves Romanticists, have a conception of art which is different from his? The constructive part of the treatise, the theory of humanism, meets with Mr. Ball's enthusiastic approval, but the chapters dealing with the four "fallacies" he holds to be

unnecessary and misconceived. To many people, however, this destructive part will appeal just as strongly. In fact, they will experience a sense of lively gratitude in that a much needed task has been so admirably performed. The final exposure of the Romantic fallacy was even more to be desired than that of the "mechanical," "ethical," and "biological," for these latter are not so deeply rooted in popular sentiment. In the opinion of Mr. Scott, "Romanticism consists in a high development of poetical sensibility towards the remote as such." Mr. Ball replies that "no very critical eye is needed to see that all this is directed principally against the Gothic Revival; as a definition of the Romantic in art it cannot be received for a moment. According to this theory Renaissance architecture must be pronounced Romantic, for without question it was a cult of the extinct, without question it was inspired by the distant and the past." But surely there is a vast difference between the two cases! At the time of the Renaissance the relics of ancient civilisation were valued not because they were old, but because a living message was inscribed in them. The Italians searched the pages of Aristotle for new knowledge about science and politics, for a new insight into human nature, and from the Roman monuments they tried to deduce a code of architecture which might be adapted for their own purposes. Here was no sentimental idealisation of the past, no cult of the extinct, but a frank recognition of the intellectual superiority of those who came before them. In fact (if one may use the language affected by logicians), in the eyes of the Renaissance artists the antiquity of a building was not a *property* of the building, but only an *accident*. But the Gothic Revivalists thought otherwise. Ruskin says, and he puts this passage in fat print for greater emphasis, "Indeed the greatest glory of a building is not in its stones nor in its gold. Its glory is in its Age, and in that deep sense of voicefulness, of stern watching, of mysterious sympathy, nay, even of approval or condemnation, which we feel in walls that have long been washed by the passing waves of humanity . . . . it is in that golden stain of time that we are to look for the real light, and colour, and preciousness of architecture." It is one of the justifications of Mr. Scott's book that this attitude is still widely prevalent among us, and must be completely modified before there can be that critical appreciation of modern buildings without which no general advance in architecture is at all possible. The English public weeps for the cities of Belgium, "precious links with the Middle Age"; but it does not lift up a finger to save Regent Street, an architectural possession of far greater æsthetic merit than anything at Louvain. The reason of this is that for the most part the clever politicians, lawyers and journalists by whom our country is governed, in so far as they devote any thought to architecture at all, approach it with a Romanticist prejudice. For them a building is either a utilitarian necessity or else "an interesting record." If the house where Ben Johnson lived is threatened influential voices are raised in its defence; but when speculative builders leave their devastating mark on London of the eighteenth century and of the Regency, there seems to be none that can say them nay.

It is to be hoped that Mr. Geoffrey Scott's book, which, by reason of its profound scholarship and elegant prose style, is eminently calculated to attract the lay mind, may have the effect of turning men's attention from the accidental associatoins connected with a work of architecture to the actual form of the work itself. This is the error of the Romanticist—he is so much occupied with his sentiments and emotions that he is unlikely to arrive at a true understanding of the external world. He is not sufficiently impersonal. But, according to Mr. Ball's definition, the term "Romanticism" embraces great art of every kind, both ancient and modern. All art is Romantic, and everything Romantic is good. That has never been the universally received opinion. "The Classic is health, the Romantic is disease," says Goethe.

Yours faithfully,

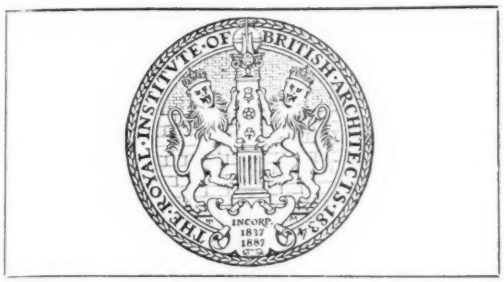
A. Trystan Edwards.

Painting in War Time.

Mr. Alexander Davidson, writing for and on behalf of the London Association of Master Decorators, of which body he is Secretary, says it is estimated that there are at the present time as many as 40 per cent. of the London Operative Painters out of work, a percentage far in excess of the normal for the time of year. Much distress exists among this class in consequence, and unless work is soon forthcoming the distress must grow rapidly. Those who control property, whether as owners, architects, solicitors or estate agents, as well as public and parochial bodies, can render valuable assistance in alleviating this distress without trespassing upon their claims for charity, if they will forthwith give orders for such painting and decorating as may be required.

Entirely apart from decorative work that might well be proceeded with, there is a vast amount of painting that is urgently required for purely protective purposes. The prices of the most important products used by painters, such as white lead, linseed oil, turpentine and paperhangings, are practically the same as they were at this time last year. The fact that master painters, in their desire to keep their men employed, are willing to cut their margin of profit to the extreme limit means, in effect, that the cost of painting and decorating work at the present time is as low, or even lower, than usual.

The idea that autumn and winter are not good times for painting operations is entirely erroneous. All inside work may be carried out quite as safely at those times, while outside work is just as durable, provided that it be temporarily suspended in foggy or wet days. Indeed, for some reasons the conditions are more favourable—as, for instance, in the absence of clouds of dust and sudden showers which occur so frequently in hot weather. It is certain that there is at the present time many hundreds of thousands of pounds' worth of painting and decorating work which might well be done. By ordering it to be proceeded with immediately property owners would do much good to the community, and, in addition, would be directly benefited themselves.



9 CONDUIT STREET, LONDON, W., *5th December* 1914.

CHRONICLE.

The London Society's Great Project.

Lord Plymouth gives in the October number of the *Journal of the London Society* details of the preparation of an important Plan for the development of London, which it is claimed will not only supply a great need, but incidentally will also be the means of affording much-needed occupation to many whose ordinary work is interfered with by the War, and who would work under the direction of a strong Committee of experts appointed by the Society for the purpose and who are prepared to give their time and experience to the work. It is proposed to work in close co-operation with the Architects' Benevolent Society, the Artists' General Benevolent Institution, the Special War Committee of the R.I.B.A., and the Special War Committee of the Surveyors' Institution, to all of whom full details of the proposals have been sent. Steps have also been taken to get into touch with the National Relief Fund and other kindred bodies. We quote the following from the article in question:—

In the brilliant and eventful history of France the period of the Revolution is perhaps the last where one could expect to find an example that could be followed by London to-day. Yet it is so. Amid all that atmosphere of blood and terror the nation of ideas preserved faith with itself and mapped out a beautiful city. The labours of the Commission of Artists which the First Republic appointed in 1793 rank to this day among the most remarkable pieces of Town-Planning in existence. Fifty years later, Napoleon III. and Baron von Haussmann were guided by the plan of the Revolutionary Artists as the first Napoleon had been before them. The effect is seen on Paris as we know it. To that Artists' Commission of 1793 belongs the conception of the Rue de Rivoli, the connection of the Place Vendôme to the Rue de Rivoli by the Rue Castiglioni, and to the Boulevard des Capucines by the Rue de la Paix, and a host of other things.

All must feel that the best is not being done with London. It has grown up haphazard; in spite of many efforts its development is still haphazard. Until there is one great uniformly-executed plan to refer to, the eighty and more local authorities who control our monster community of seven and a half million people in 700 square miles will go on each making its own changes without any sort of relation to the whole. In the London Society the nucleus of an organisation to head this movement for a Plan already exists. Now is the time to utilise the best brains upon this work of national importance. The professional men of London could be employed upon it. Many are badly hit by the War, though their condition is far from resembling that of the German artists and sculptors, whose immediate wants have to be looked after by a Committee of Berlin aristocrats.

This scheme would utilise the energies of London artists, architects, and surveyors in a manner that would provide work for them and at the same time be of the highest permanent value. Let no one be under the delusion that the Plan would not pay London, and, through it, the nation. London could become the great example of the economic value and use which skilful town-planning extracts out of every yard of a city, and of the way in which it can be worked into an effect of civic beauty. Paris has recouped herself many times over for her enormous outlay. Well-conceived schemes would repay London equally well. To do the best with London before it is too late, the Plan which we advocate is urgently and prudently essential. It would become the inspiration for the future growth of London, as the proposals of the artists of Revolutionary France became the inspiration for the growth of that Paris which is the delight of the whole world to-day.

The Council of the London Society intend to put into execution the project outlined above. What the French Artists of the Revolution did for Paris in the French manner, the London Society intends that the English Artists shall have an opportunity to do for London in the English manner.

There is much work of a varied character that requires to be done. The plan of London needs studying as a whole. There are numerous town-planning schemes being prepared for isolated bits of London. There are numerous schemes of local improvement which have been suggested from time to time. There is a great scheme of Arterial Roads which is being studied by six divisional Conferences of Local Authorities and others. There is constant demand first from one district and then from another to save some piece of ground for Open Spaces; to preserve a view-point, or provide a new park. There is a great need for more Playing Fields and Recreation Grounds, a need the urgency of which is emphasised by the physical unfitness of many thousands of London youths who might otherwise now be taking up arms in defence of their country's honour.

All these schemes, proposals, and demands, are of the utmost importance and value; but it is still more important that they should all be brought together on to one great plan so that the requirements of London may be studied comprehensively, so that the reaction of one proposal upon another may be realised, so that congestion at one point may not be relieved at the expense of worse congestion at another, so that open spaces may not be denied to a district where they are most urgently needed in order that the demands of a more clamorous district may be satisfied.

Some hundreds of delegates are trying to study a system of Main Roads leading out of London, but there is no map upon which they can see the conditions of London as a whole, there is no map upon which the contours are coloured to show the hills and valleys, on which the relation between the Main Roads and the existing and desirable Open Spaces can be studied; on which, in short,

all the existing information can be brought together, and all the valuable suggestions that have from time to time been made by different individuals or bodies can be set down and considered in their relation one to another.

This is the work upon which the London Society wish to focus the work of a number of professional men, confident that the very focussing of skilled minds looking at the problem from different points of view will lead to many valuable new suggestions for modifying and co-ordinating the various proposals which from time to time have been made. Before long the District Conferences which are considering the Main Roads of each district will be reporting. This will be the time to bring together the results of their labours, and to consider them in relation to all the other matters referred to above; and not least important will it be to study the effect on the central area of London which would follow the making of this system of main highways in the outer area.

The Open Spaces Committee of the London Society have already prepared a plan showing most of the existing Open Spaces. This needs completing, and has been waiting for just such an opportunity as the present to secure the help of professional men who could not ordinarily spare time for the work. It needs especially the possibilities for future Open Spaces indicated upon it. This map is in sixteen sections, each of which can be taken, worked up, and perfected by someone thoroughly knowing the district.

It is not suggested that this plan, when made, would be final or conclusive; but it would at least form a most valuable basis of solid information and suggestion, for the first time completely brought together and graphically represented, something which could be worked upon, criticised and improved. It is not too much to hope that such a body of willing workers, inspired by a desire to do some public service to London, would evolve new imaginative suggestions for Schemes of Improvement which would not only be of the utmost economic and commercial value to London, but might form a fitting memorial of the great time of strain and effort through which the country is now passing.

An appeal is made for subscriptions towards the Fund for the preparation of a Plan. Promises of donations have been received from Sir Aston Webb, R.A., £50; Lord Plymouth, £20; Mr. Carmichael Thomas, £10; Mr. Raymond Unwin, £10. Subscriptions should be sent to the Secretary of the London Society, 27 Abingdon Street, S.W.

An Architect's Call to Arms.

We print below the peroration of the stirring Address delivered by Mr. R. Burns Dick, Member of the R.I.B.A. Council, President of the Northern Architectural Association, at the inaugural meeting of the Session held at Newcastle-on-Tyne on the 25th November.

Rouse ye, ye builders! Cannot you hear the crumbling and crackling of the doomed walls of nations? Does not the sight of those slowly raised and mighty structures of Empire, tottering from the impact of the thunderbolts hurled by one against the other, stir your innermost being? One at least of these empires will survive, and with renewed vigour repair her damaged walls and raise anew with greater grandeur the towers of a loftier civilisation. But which? You are surprised if not pained at such a question. There can be but one answer, you say. Quite right, there is but one answer if you are content to entrust your country's position to your neighbour. It will be the citadel of your enemy that will survive. This concerns you, each of us, and if you wish to see the British Empire emerge greater than ever, now is the time to engage in a greater work of restoration, rebuilding, and extension than ever you dreamt of when you took up architecture for a career.

You cannot prop her threatened walls with a T-square, nor tie them together with a tape line; you cannot, by studying the strength of materials and graphic statics, judge whether she is capable of resisting collapse; you cannot, by following the birth and progress of architectural styles, say whether she has outlived her strength or is still in the prime of her life. No, fling from you till a more fitting time your T-square and the tools of your trade, pick up the spade of the sapper, learn to pontoon the flowing river for the advancing hosts of your brothers-in-arms; by such engineering will you ensure the stability of the walls of our Empire. Thrust back to their shelves your Rivingtons and your text-books on strains and stresses, shoulder a rifle or work the breech-block of a quick-firer, so only will you ward off the forces that would bring about her collapse. Shut up your histories of styles, seek in the stories of Britain's heroes and learn the history of her past, and by falling in at the bugle's call add the fuel of perennial youth to the fires of her greatness.

Aux armes, citoyens! Formez vos bataillons!
Marchons, marchons!

Mr. Burns Dick has since joined his old regiment, the Tynemouth Royal Garrison Artillery, for the duration of the War.

The Prince of Wales's National Relief Fund.

The following letter, addressed to the Secretary R.I.B.A., has been received from Buckingham Palace:

DEAR SIR,—I am desired by the Prince of Wales to acknowledge the receipt of your letter of the 2nd November, enclosing a cheque for £210, being the first contribution to the National Relief Fund from the Architects' War Committee.

His Royal Highness was much pleased at receiving this welcome addition to the Fund, and requests that you will make known to the members of the architectural profession, who have so generously subscribed, how warmly he appreciates their support.

I am, yours faithfully,
WALTER PEACOCK,
Treasurer to His Royal Highness.

Letter from the French Ambassador.

The following letter, addressed to the Secretary R.I.B.A., has been received from the French Ambassador in London:

Ambassade de France à Londres: *18th Nov.* 1914.

SIR,—I beg to offer to the Royal Institute of British Architects my sincere thanks for the resolution passed at their meeting of 2nd November, expressing their sympathy with the French Nation in the losses sustained during the war by the wanton destruction of beautiful and historical monuments.

I am sending that expression of the feelings of your Society to the Government of the Republic, for which, I am sure, they will be particularly grateful.—Yours truly,

PAUL CAMBON.

The late Lieut. Doll, killed in action.

The following letter has been received from Mr. FitzRoy Doll [*F.*]:

Hadham Towers, Much Hadham, Herts, 28th Nov. 1914.

DEAR MR. MACALISTER,—Will you kindly convey to my fellow-members of the Royal Institute of British Architects my most grateful thanks to them for the kind resolution of sympathy with me in the loss of my dear son Lieut. Philip Walter Rudolph Doll at the front.—Yours very truly,

CHAS. FITZROY DOLL.

The Architects' Special War Relief Fund.

Members are reminded that subscriptions to the Architects' War Relief Fund [*see* JOURNAL R.I.B.A., 26th September, 1914] should be made payable to the Hon. Secretary, Architects' War Committee, 9 Conduit Street, Regent Street, W.

Colouring the Wood of Growing Trees.

The *Indian Forester* makes reference to a remarkable experiment in colouring artificially the wood of trees while in a growing state. By running a system of boreholes right through the trunk, stopping one end with cork and introducing a dye, the tree may be made to absorb the colouring matter. Thus the aniline dyes of malachite green and methylene blue coloured birch evenly, and eosin veined the wood with red. As the darker shades in wood have a higher value than the lighter, it is considered possible that by impregnating, for instance, a tannin-free wood like birch or maple with a tannin solution during growth, it would later be easy to give these woods a rich dark tint similar to that of the oak, which is rich in tannin, by means of treating it with ammonia under pressure.

OBITUARY.

Mr. Stockdale Harrison, whose death on the 10th November was announced at the meeting of the 16th, was born in Leicester in 1846, and in 1862 was articled to the late James Bird of that town. In 1868 he went to London, and was for two years under Mr. Somers Clarke. Returning to Leicester in 1870, he started practice simultaneously with his old schoolfellow, the late Isaac Barradale. Both met with success in their profession, and each left his mark on the architecture of the town. Mr. Harrison was perhaps best known by his domestic and commercial work, and many private houses and important factories testify to his soundness and ability in these important spheres. The factories of Messrs. Hart & Levy, N. Corah & Sons, Thomas Brown & Co., and the British United Shoe Machinery Company were by him, and many people in the town and county went to Mr. Harrison with confidence when they wished to build a house for themselves. He designed several churches, including St. Thomas's, Wigston, and St. Stephen's and St. Guthlac's in Leicester, and carried out successfully various ecclesiastical restorations. He was also entrusted with the erection of the Leicester Working Men's College, the Vestry Street Baths for the Corporation of Leicester, Messrs. Barclay & Co.'s banks in Leicester and Peterborough, and the recently built De Montfort Hall, Leicester. These instances will suffice to show the confidence placed in him by those who knew his work and the integrity of his methods. As a man Mr. Harrison was genial, kindly, and singularly unaffected, and his modest worth won him the warm regards of all who had to do with him. He was a lifelong friend of John Fulleylove, the distinguished painter, who was likewise a native of Leicester and a fellow-pupil at Mill Hill House School under Highton, where so many local worthies have received their education. He took an enlightened interest in all matters artistic, and was helpful in many directions that made for the good of the town. The large and representative gathering that assembled in St. Martin's Church to pay the last tribute of respect indicated the esteem in which he was held by his neighbours and professional brethren. Mr. Harrison became an Associate of the Institute in 1882, and a Fellow in 1890. He left a widow, three sons, and two daughters. His sons, Messrs. Stockdale and Shirley Harrison, both Associates of the Institute, and for some years past in partnership with their father, are continuing the practice.

Mr. Edmund Thomas Perrott, who died at his residence, Cartref, Sutton, Surrey, on the 14th November, at the age of 68, was elected an Associate of the Institute in 1882, Fellow in 1888, and retired from membership in 1909. He was born at Stratford-on-Avon, of an old Worcestershire family, was educated at Cheltenham, and articled to the late Mr. Whitfield Daukes, of Whitehall. After working with Mr. Preedy he began practice in John Street, Bedford Row, about the year 1874, and soon afterwards he left London in order to reside at Sutton, where much of his later work was executed. In 1876, in collaboration with Mr. Charles Henman and Mr. William Harrison, he obtained the first place in the competition for Walsall Cottage Hospital, and the building was erected from their design. In the same year Mr. Perrott was at work on the Church of St. John, at Portmadoc, North Wales, and other work in the same town. At about the same time he designed the little Church of St. Martha at Tyddyngwn, close to Festiniog, which was enlarged and completed in 1885. Both these churches, built with local materials, are thoroughly suited to their surroundings. From 1884 to 1890 Mr. Perrott was assisted in his work by Mr. R. Langton Cole, who lived near him, and during this period the buildings carried out included Sutton Rectory, St. Barnabas Vicarage,

the small Public Hall, the offices of the Sutton Water Co., and other works in the neighbourhood, as well as the rebuilding of Messrs. Bartrum, Harvey and Co.'s warehouse in Gresham Street, E.C. Between 1890 and 1904 Mr. Perrott was chiefly engaged on domestic work in Surrey, and in the latter year he met with a bicycle accident from which he never wholly recovered. His failing health compelled him, at first, to live a good deal abroad, and ultimately to give up his practice altogether. In all his work Mr. Perrott obtained the effect he desired by careful attention to the smallest details, combined with restraint in the general design, with the result that (to the writer, at any rate) his buildings seem as fresh and pleasing now as when they were erected, in spite of the kaleidoscopic changes which have taken place in so much of suburban architecture. Although his professional work occupied the greater part of his time, Mr. Perrott took a great interest in local affairs, and was unsparing in his exertions for furthering any cause in which he was concerned. He was a member of the first Sutton Local Board, was a churchwarden of the Parish Church, and Secretary of the local Conservative Association. He also took a deep interest in musical matters, and his long illness was a source of deep regret to his numerous friends and acquaintances.—R. Langton Cole [*F.*].

THE EXAMINATIONS.

The Special Examination, Melbourne.

At the R.I.B.A. Special Examination held in July at Melbourne, under the auspices of the Royal Victorian Institute of Architects, five candidates were examined, and the following passed :—John Algernon Edward Toone, Commonwealth of Australia Home Affairs Department, 151 Collins Street, Melbourne.

MINUTES. III.

At the Third General Meeting (Business) of the Session 1914–15, held Monday 30th November 1914, at 8 p.m.—Present : Mr. George Hubbard, F.S.A., Vice-President, in the Chair, 13 Fellows (including 7 members of the Council), and 9 Associates (including 3 members of the Council)—the Minutes of the Meeting held 16th November, having been published in the Journal, were taken as read and signed as correct.

The Hon. Secretary announced the decease of Frederic Kirk, *Associate*, elected 1882.

Letters were read from M. Paul Cambon, the French Ambassador in London, Mr. Walter Peacock, Treasurer to H.R.H. the Prince of Wales, and Mr. Chas. FitzRoy Doll [*F.*].

The Hon. Secretary announced presentations to the Library, and a vote of thanks was passed to the donors.

The following candidates were elected by show of hands:

As Fellows (14).

DAVIS : J. Stacey [*A.* 1865] (Plymouth).
DOSSOR : John Malcolm [*A.* 1896] (Hull).
FRASER : Gilbert Wilson [*A.* 1897] (Liverpool).
HADFIELD : Charles Matthew Ellison [*A.* 1896] (Sheffield).
KEMPSON : Charles, Assoc.M.Inst.C.E. [*A.* 1894] (Leicester.)
LANDER : Harold Clapham [*A.* 1894].
ROBINSON : Hurley [*A.* 1907] (Birmingham).
SHARP : Cecil Alexander [*A.* 1895].
WOODESON : Austin [*A.* 1906] (Ceylon).

and the following Licentiates, who had passed the qualifying Examination :—

BEWLAY : Ernest Chawner (Birmingham).
BOWLES : Charles William.
BROOKS : Stanford Morton.
JACKSON : Martin Thomas Ernest.
WYNNES : James Cumming (Edinburgh).

As Associates (41).

ANDERTON : Richard [*S.* 1910] (Preston).
BARBER : Richard Alfred [*S.* 1908].
BRYANT : Herbert Phillips [*S.* 1910] (Southampton).
BURNETT : Andrew Stuart [*S.* 1911] (Southampton).
CALLENDER : George Wilfred [*S.* 1913].
CALVERT : Charles Henry [*S.* 1908] (Nottingham).
CLARK : Walter Llewellyn [*S.* 1910].
COOKSEY : Harold Thoresby [*S.* 1912].
DICKESON : Colin Addison [*Special*] (New Zealand).
EBBS : Edward Harold Montague [*S.* 1911].
FOWELL : Joseph Charles [*S.* 1910].
GODWIN : William Hubert [*S.* 1911] (Bewdley).
GRIFFIN : Douglas Morley [*S.* 1911] (Liverpool).
HARRISON : William Holgate [*S.* 1910] (Whalley, Lancs.).
HEARNE : Frank [*Special*] (Oldham).
HEMBROW : James [*Special*].
HICKMAN : Ernest James [*S.* 1911] (Birmingham).
HOWARD : Percy [*S.* 1909] (Manchester).
HUGHES : Basil, P.A.S.I. [*S.* 1910].
ISAAC : William John [*S.* 1907] (York).
JARRETT : Eric Rawlstone [*S.* 1908].
JESSOP : Bernard [*S.* 1911] (Nottingham).
KALTENBACH : Albert Frederick [*S.* 1912].
KRUCKENBERG : Frederick Lawrence [*S.* 1910] (Leeds).
LEDGER : Godfrey Horton [*S.* 1911].
LEECH : William Leonard Boghurst [*S.* 1909].
MACRAE : Ebenezer James, *Licentiate* [*Special*] (Edinburgh
MILLER : Stanley Russell [*S.* 1909].
PEERMAHOMED : Abdulla Bhanji [*S.* 1912].
PERKINS : Thomas Luff [*Special*] (Hong Kong).
PHILP : Richard Manning Haig [*S.* 1913].
RIDLEY : Geoffrey William [*S.* 1909] (East Grinstead).
RIPLEY : Cedric Gurney [*S.* 1912] (Ipswich).
ROLLEY : Horace Edwin [*Special*].
SILCOCK : Arnold [*S.* 1911] (Bath).
STAFFORD : Charles Ernest [*Special*] (Derby).
STANLEY : Gerald [*Special*] (Trowbridge).
TAYLOR : Herbert Samuel [*S.* 1910].
TYTE : Gilbert George Lee [*S.* 1910].
WADDINGTON : Harold Gerard [*S.* 1910] (Blackpool).
WOOD : Arthur Jackson [*S.* 1913] (Leicester).

As Hon. Associate (1).

GOMME : Sir Laurence, J.P., F.S.A.

On the motion of the Hon. Secretary, seconded by Mr. Alexander N. Paterson [*F.*], Mr. J. A. O. Allan, *Licentiate*, was withdrawn from the list of candidates for Fellowship.

The proceedings then closed and the Meeting separated at 8.30.

COMPETITIONS.

Workmen's Houses, Milldamhead, Dumfries.

Members and Licentiates are advised that the conditions of the above competition are not in accordance with the Institute Regulations for Architectural Competitions, and the Competitions Committee are in correspondence with the promoters with a view to their amendment.

Ian MacAlister, *Secretary.*